

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,342	03/24/2004	Bumman Kim	1751-356	3490
6449	7590 04/10/2006	·	EXAMINER	
ROTHWELL, FIGG, ERNST & MANBECK, P.C. 1425 K STREET, N.W.			FLANAGAN, KRISTA M	
SUITE 800	cei, n.w.		ART UNIT	PAPER NUMBER
	ON, DC 20005		2817	

DATE MAILED: 04/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

			<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>					
	Application No.	· Applicant(s)						
	10/807,342	KIM ET AL.						
Office Action Summary	Examiner	Art Unit .						
	Krista M. Flanagan	2817						
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet	t with the correspondence add	dress					
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMU 136(a). In no event, however, may will apply and will expire SIX (6) No e, cause the application to become	NICATION. y a reply be timely filed MONTHS from the mailing date of this co e ABANDONED (35 U.S.C. § 133).						
Status			•					
1) Responsive to communication(s) filed on 14 L	December 2005.							
2a) This action is FINAL . 2b) ⊠ This								
3) Since this application is in condition for allowa	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practice under	Ex parte Quayle, 1935 (D.D. 11, 453 O.G. 213.	•					
Disposition of Claims								
4)⊠ Claim(s) <u>1-12</u> is/are pending in the application	n							
4a) Of the above claim(s) is/are withdrawn from consideration.								
5)⊠ Claim(s) <u>7-9 and 12</u> is/are allowed.								
6)⊠ Claim(s) <u>1 and 10</u> is/are rejected.	i)⊠ Claim(s) <u>1 and 10</u> is/are rejected.							
	Claim(s) <u>2-6 and 11</u> is/are objected to.							
8) Claim(s) are subject to restriction and/o	or election requirement.							
Application Papers		•						
9) The specification is objected to by the Examine	er.							
10)⊠ The drawing(s) filed on 14 December 2005 is/a		<u>)</u> objected to by the Exam	iner.					
Applicant may not request that any objection to the	drawing(s) be held in abe	yance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correct		- · · · · · · · · · · · · · · · · · · ·	• •					
11) The oath or declaration is objected to by the E	xaminer. Note the attacl	ned Office Action or form PT	O-152.					
Priority under 35 U.S.C. § 119								
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	n priority under 35 U.S.C). § 119(a)-(d) or (f).						
1. Certified copies of the priority documen	ts have been received.							
2. Certified copies of the priority document	ts have been received in	n Application No						
3. Copies of the certified copies of the price		en received in this National	Stage					
application from the International Burea	, , , , , , , , , , , , , , , , , , , ,	•						
* See the attached detailed Office action for a list	t of the certified copies r	ot received.						
•								
Attachment(s)								
1) Notice of References Cited (PTO-892)	4) 🔲 Intervie	ew Summary (PTO-413)						
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 		No(s)/Mail Date of Informal Patent Application (PTO	ı_152\					
Paper No(s)/Mail Date 10/03/05, 02/16/06.	6) Other:		.52,					

Application/Control Number: 10/807,342 Page 2

Art Unit: 2817

DETAILED ACTION

Response to Amendment

Drawings

1. In light of the amendment filed on 14 December 2005, the Examiner withdraws all objections to the drawings from the previous Office Action.

Specification

2. In light of the amendment filed on 14 December 2005, the Examiner withdraws all objections to the specification from the previous Office Action.

Claim Rejections - 35 USC § 102

- 3. The indicated allowability of claims 10 and 11 is withdrawn in view of the newly discovered reference(s) to prior art figure 1. Rejections based on the newly cited reference(s) follow.
- 4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 5. Claims 1 and 10 are rejected under 35 U.S.C. 102(a) as being anticipated by prior art figure 1 and corresponding statements of current application.
- 6. Regarding claims 1 and 10, prior art figure 1 and corresponding text discloses an analog feedback predistorter where and the input to the power amplifier is subtracted from the output of the power amplifier and an inverse distortion component is extracted. The inverse distortion component is then added to the input signal through a feedback loop. The summation is then

Application/Control Number: 10/807,342 Page 3

Art Unit: 2817

input to the power amplifier so that linearity is improved. Preamble is not given any patentable weight.

Allowable Subject Matter

- 7. Claims 2-6 and 11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
- 8. Claims 7-9 and 12 are allowed.
- 9. The following is a statement of reasons for the indication of allowable subject matter: Prior art fails to disclose an apparatus and method to linearize a power amplifier where the optimal predistorted signal for an input signal is generated by obtaining an inverse distortion component corresponding to the amplitude of the input signal from a previously formed and stored lookup table.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista M. Flanagan whose telephone number is (571) 272-2203. The examiner can normally be reached on Monday - Friday, 8 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal can be reached on (571) 272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/807,342 Page 4

Art Unit: 2817

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

K. Flanagan 20060306

Robert Pascal
Supervisory Patent Examiner

Technology Center 2800